

Sustainable Project Rating Tool (SPiRiT)

DOD Prototype



US Army Corps
of Engineers

Engineer Research and Development Center

Sustainable Project Rating Tool

- + The Corps has developed a draft tool to rate the sustainability of military projects (SPiRiT).
- + The tool encompasses planning through commissioning of an individual project.
- + The rating tool is based on LEED 2.0 Green Building Rating System™ with modifications:
 - + Additional environmental requirements;
 - + Military installation context;
 - + Life-cycle synergy requirements.
- + Being coordinated with Green Building Council (USGBC)
- + Proposed for use throughout DOD.



SPIRiT Adds Life-Cycle Synergy

SPIRiT maintains basic 5 LEED 2.0™ areas of Site, Water, Energy, Materials and IEQ and adds:

- **Facility Delivery Process:**
 - Holistic process/appropriate tradeoffs;
 - Performance measurement/documentation;
 - Charrettes.
- **Current Mission:**
 - Design for O&M;
 - Design for productivity.
- **Future Mission:**
 - Assess life spans;
 - Design for reuse/recycling.



SPIRiT Scoring

• Sustainable Sites:	20	Green Results
• Water Efficiency:	5	
• Energy and Atmosphere:	28	
• Materials and Resources:	13	
• Indoor Environmental Quality:	17	

• Facility Delivery Process	7	Life-Cycle Synergy
• Current Mission	6	
• Future Mission	4	



Maximum Score

100

SPIRiT Rating

- Designed for same look and feel as LEED 2.0 TM to reduce confusion in A/E community
- Score ratings:
 - 75-100: Platinum
 - 50-74: Gold
 - 35-49: Silver
 - 25-34: Bronze
- Bronze minimum



Sample Requirement

2.C1	Water Efficient Landscaping	
Intent:	Limit or eliminate the use of potable water for landscape irrigation.	
Requirement:	Use high efficiency irrigation technology, OR, use captured rain or recycled site water to reduce potable water consumption for irrigation by 50% over conventional means.	1
	Use only captured rain or recycled site water for an additional 50% reduction (100% total reduction) of potable water for site irrigation needs, OR, do not install permanent landscape irrigation systems.	1
Technologies /Strategies:	Specify water-efficient, native or adapted, climate tolerant plantings. High efficiency irrigation technologies include micro irrigation, moisture sensors, or weather data based controllers. Feed irrigation systems with captured rainwater, gray water, or on-site treated wastewater.	



Conclusions

- **SPiRiT sustainability measures encompasses:**
 - **Project Planning;**
 - **Design;**
 - **Contracting/Construction;**
 - **Commissioning.**
- **SPiRiT is evolving and coordination among the services and GBC is underway.**
- **SPiRiT is designed to take us into the 21st Century where sustainability is the key to success.**

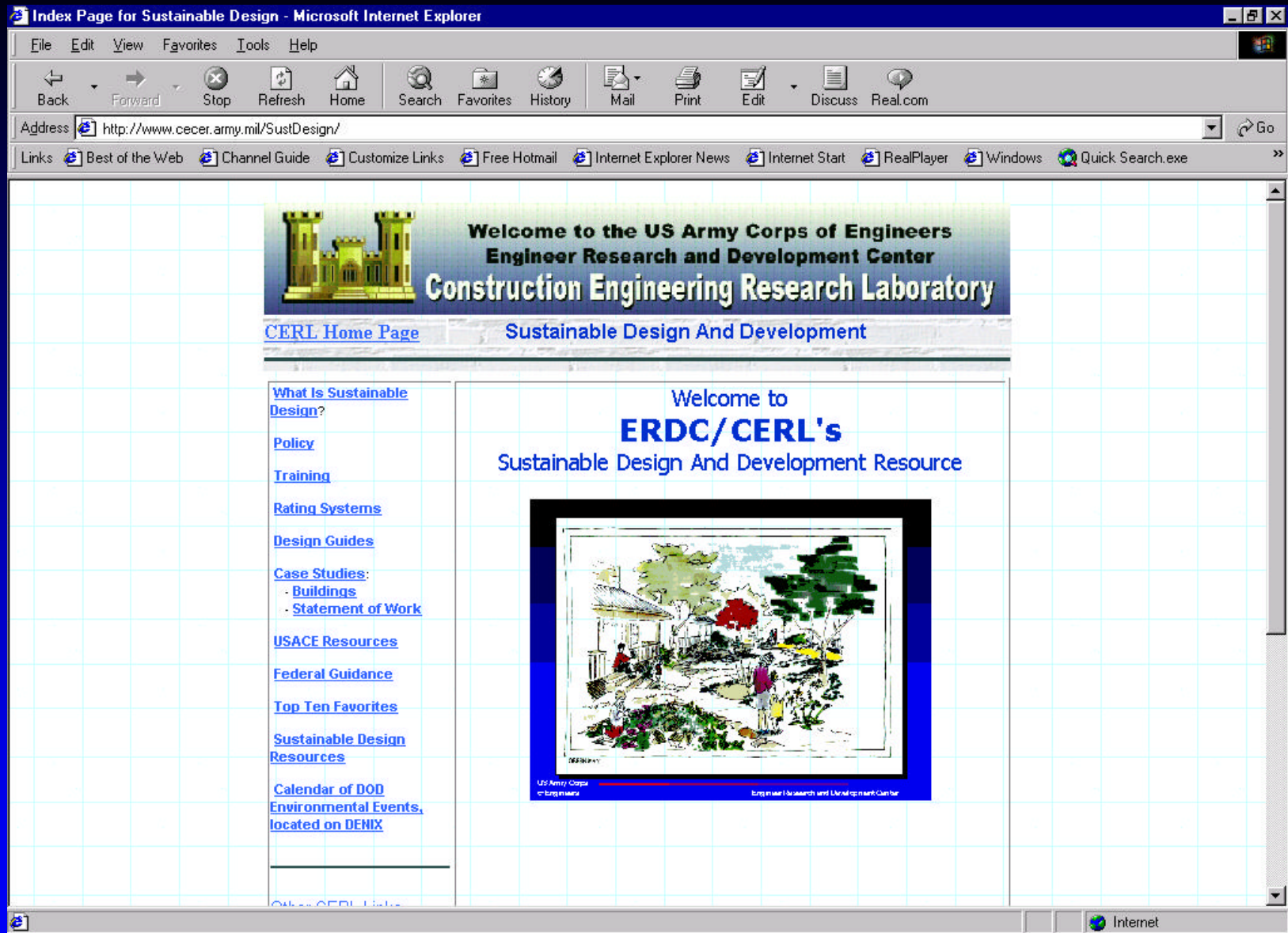


Points of Contact

- **Sustainable Design & Development**

- **Project Leader - Stephen N. Flanders**, CEERD-RR, 603/646-4302, stephen.n.flanders@erdc.usace.army.mil
- **Guidance for Sustainable Building Delivery - Richard L. Schneider**, CEERD-CN-E, 217/398-5424, richard.l.schneider@erdc.usace.army.mil
- **Sustainable Indices and Metrics – Donald F. Fournier**, CEERD-CF-E, 217/373-7461, donald.f.fournier@erdc.usace.army.mil & **Brian M. Deal**, CEERD-CF-E, 217/373-7461, brian.m.deal@erdc.usace.army.mil
- **Sustainable Designer's Aid - Annette L. Stumpf**, CEERD-CF-N, 217/373-7542, annette.l.stumpf@erdc.usace.army.mil





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